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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,221	02/19/2004	Steven J. Carpenter	Roto-Finish C-57A	5300
23474	7590	12/17/2004	EXAMINER	
FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1699			SHAKERI, HADI	
			ART UNIT	PAPER NUMBER

3723

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/782,221

Applicant(s)

CARPENTER, STEVEN J.

Examiner

Hadi Shakeri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 19-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-37 is/are allowed.
- 6) ☒ Claim(s) 19, 20 and 38-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 19, 20, 38-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 19, 20, 38 and 45, the phrase "providing the workpiece (casing claim 45) with first and second aligned access opening..." renders the claims indefinite because it is unclear whether a method of forming the workpiece, e.g., drilling to provide the opening is being claimed. It appears the step of providing the workpiece should include the additional limitations, e.g., "providing a workpiece having an interior chamber including first and second..." and for depended claims to recite, "A process according... wherein the workpiece includes... and the process further includes...". The language as written, i.e., including a positive step of "providing features for the workpiece is indefinite.

### *Claim Rejections - 35 USC § 103*

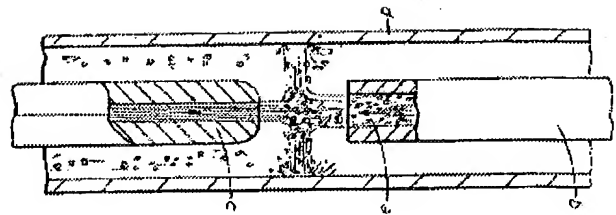
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 38, 39 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vauxhall Motors Limited, British Patent No. 631,417.

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British Patent '417 discloses a method for treatment of metallic and like hard surfaces by impingement of high-speed particles meeting all the steps of the claims, i.e., providing a workpiece



having an elongated interior chamber (p), positioning first and second nozzles (a) (c) within the chamber so that discharge nozzles are positioned closely adjacent and directly opposed each other, supplying cylindrical pressurized streams to the nozzles, simultaneously discharging opposed streams from the discharge openings impacting one another and deflecting radially outwardly in a surrounding annular pattern impacting the interior and simultaneously moving the nozzles members, while maintaining a fixed relation, progressively treating the boundary wall; except for disclosing supplying "equal" streams to the nozzles both having solid abrasives.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the method of GB '417 by supplying streams of abrasives and air through both nozzles (inherently meeting the "equal" limitations for the radial deflection to be vertical) in applications where stronger abrasion is required like un-coating rust or paint from the interior surface.

It is noted that the step of initially positioning the discharge openings with the spacing of one inch is dependent on the workpiece and operational parameters, e.g., for a small pipe. It would have been obvious to one having ordinary skill in the art at the time the invention was made to initially position the nozzles at one inch, e.g., for application on small diameter pipes, which would involve only routine skill in the art.

5. Claims 40 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB '417 as applied to claim 1 above further in view of Cook et al.

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GB '417 as applied to claim 1 above meets all the limitations of the above claims, except for disclosing supplying the fluid without the abrasives for removal of debris. Cook et al. teaches a method in which after supplying abrasive solution through a nozzle (14), high-pressure water without the abrasive is supplied through the nozzle (14) for washing and cleaning the surface. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the modified method of Saunders with supplying pure water after a treatment process as taught by Cook et al. to rinse the workpiece.

#### ***Allowable Subject Matter***

6. Claims 21-37 are allowed.
7. Claims 19, 20, 41-44, 47 and 48 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

#### ***Response to Arguments***

8. Applicant's arguments filed 02/19/04 have been fully considered but they are not persuasive. The arguments do not point out which claim step is not met by GB '417 as modified above. As indicated above supplying abrasive through both nozzles where stronger abrasion is required is within the knowledge of one of ordinary skill in the art.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hadi Shakeri whose telephone number is (571) 272-4495. The examiner can normally be reached on Monday-Friday.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Hadi Shakeri", is positioned above the printed name and title.

Hadi Shakeri  
Primary Examiner  
Art Unit 3723  
December 11, 2004